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To: Mr. Jeffry Rodin, On-Scene Coordinator
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From: Mr. Greg Mazer

cc: Mr. Tom Campbell, Mr. Steve Hall

Date: January 7, 2016

**RE: Threatened and Endangered Species Review - DRAFT
Gorst Creek – Bremerton Auto-Wrecking Landfill
Kitsap County, Washington**

This memorandum is in response to your request to Ecology and Environment, Inc. (E & E), under Superfund Technical Assessment and Response Team (START)-IV contract number EP-S7-13-07, Technical Direction Document (TDD) 15-08-0002, for a review of potential impacts on federally endangered, threatened, candidate, or proposed species and critical habitats designated under the Endangered Species Act (ESA) that may result from the planned removal action to address landfill waste and debris at the Bremerton Auto Wrecking Landfill (Site). E & E has determined that the removal action would not affect any ESA-listed species or critical habitats and advises that you seek acknowledgement of any potential concerns regarding this determination from the United States Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS). The remainder of this letter addresses the basis for the determination.

As part of the planned removal action, landfill waste and debris at the Site will be removed and an approximation of the physical, hydrologic, and biological conditions that had been present prior to landfill establishment in 1968 will be restored. EPA is performing this action as a non-time-critical removal action in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended.

The removal action's disturbance footprint will be confined to the Site, which is an approximately 10-acre area located within and adjacent to a portion of the ravine surrounding Gorst Creek, a tributary of the Sinclair Inlet of Puget Sound. The Site is located in Kitsap County approximately 5 miles southwest of Port Orchard, Washington. It is in the northwest quarter of the southwest quarter of Section 1, Township 23 North, Range 1 West.

The removal action will apply best management practices (BMPs) to avoid and minimize any adverse effects from occurring during project implementation. EPA's Emergency and Rapid Response Services (ERRS) contractor will implement and maintain BMPs in accordance with a site-specific stormwater pollution prevention plan and temporary erosion and sediment control plan.

E & E performed a desktop review of the existing conditions within the potential action area for the Site in comparison with the geographic ranges and habitat preferences of all ESA-managed species in the removal action vicinity. Action area is defined by regulation as all areas to be affected directly or indirectly by a Federal action and not merely the immediate area involved in

the action (50 CFR §402.02). The action area that we suggest for the planned removal action includes the Site and the downstream extent of Gorst Creek.

A search of the USFWS Information for Planning and Conservation (IPaC) online database determined that there are five species managed under the ESA that potentially occur in the suggested action area (USFWS 2015). An additional species managed under ESA and potentially occurring in the action area was included in our analysis. This species (steelhead trout) is not indicated by IPaC because there is not yet any critical habitat designated for it.

Table 1 provides a list of these six species and a concise summary of the rationale used in arriving at a no effect determination. A more detailed discussion of the no effect determination for each species is also provided.

Table 1. ESA Species Potentially Occurring in the Suggested Action Area.

Common Name	Scientific Name	Status	Reason for No Effect
Fish			
Chinook salmon – Puget Sound distinct population segment	<i>Onchorhynchus tshawytscha</i>	Threatened	Although critical habitat occurs within the suggested action area, and there is a self-sustaining population in Gorst Creek, no effect due to the downstream distance and the planned BMPs.
Bull Trout – Coastal-Puget Sound distinct population segment	<i>Salvalinus confluentus</i>	Threatened	No critical habitat in removal action vicinity; no self-sustaining populations in the Gorst Creek watershed or Sinclair Inlet.
Steelhead Trout – Puget Sound distinct population segment	<i>Onchorhynchus mykiss</i>	Threatened	Although proposed critical habitat occurs within the suggested action area, and there is irregular occurrence of this species in Gorst Creek, no effect due to the downstream distance and the planned BMPs.
Birds			
Marbled Murrelet	<i>Brachyramphus marmoratus</i>	Threatened	No critical habitat in removal action vicinity; no suitable habitat such as mature or old-growth coniferous forest with large branches or other platforms for nesting, nor coastal marine waters for foraging.
Streaked Horned Lark	<i>Eremophila alpestris strigata</i>	Threatened	No critical habitat in removal action vicinity; no suitable habitat such as large grassy areas within or adjacent to Site.
Yellow-billed Cuckoo	<i>Coccyzus americanus occidentalis</i>	Threatened	No critical habitat in removal action vicinity; no suitable habitat such as riparian forest with abundant deciduous trees and shrubs within or adjacent to Site.

Puget Sound Chinook salmon (*Onchorhynchus tshawytscha*)

The Site is approximately 2.4 stream miles upstream of the critical habitat mapped for the Puget Sound Distinct Population Segment (DPS) of Chinook salmon, a threatened species under the ESA. A local population of this DPS is known to inhabit the lowermost 1.1 river miles of Gorst Creek (WDFW 2015). The Suquamish Tribe operates a Chinook salmon fish hatchery along the part of the stream mapped as critical habitat. Juvenile Chinook salmon from Gorst Creek and at least 14 other watersheds, including as far away as the Fraser River in British Columbia, use Sinclair Inlet as rearing habitat (Fresh et al. 2006).

Neither the Site nor any portions of Gorst Creek upstream or within a few hundred feet downstream of the Site have the potential to support Chinook salmon due to their current degraded conditions and the nearly impassable culvert located downstream of the Site. A 150-foot-long concrete box culvert traversing under State Route 3 is situated less than 200 feet downstream of the Site. Flow through the culvert commonly occurs at high velocities and very low (<0.1 foot) water depths. Although the culvert is listed as a partial obstruction to fish passage (WDFW 2015a), it is actually nearly impassable to all fish but a few coho (Piazza 2015).

The BMPs to be employed during landfill removal are designed to significantly minimize the release of sediments or toxins in quantities that could incur lethal or sub-lethal negative effects on the health of salmonids or any other aquatic organisms.

The removal action will have no effect on Puget Sound Chinook salmon for the following reasons: i) the substantial distance between the removal action and the local population of Chinook salmon, and ii) the above-mentioned BMPs.

Coastal-Puget Sound Bull Trout (*Salvalinus confluentus*)

The Coastal-Puget Sound DPS of Bull trout, a federally threatened species, inhabits relatively pristine, cold-water streams and lakes that have passable connectivity to other freshwater and marine habitats for annual spawning and feeding migrations (USFWS 2014).

Although Gorst Creek supports several species of salmonids that have somewhat similar habitat requirements, it does not support the pristine, cold-water conditions that are typically required by bull trout. Unsurprisingly, bull trout is not known to inhabit Gorst Creek (WDFW 2015b; City of Bremerton 2012).

There is no critical habitat mapped for bull trout in Kitsap County. The USFWS revised critical habitat designations for the bull trout in 2010 (USFWS 2010). The current critical habitat designations include 754 miles of marine shoreline in Washington. Sinclair Inlet, which is entirely within Kitsap County, was excluded from this designation.

Given that they do not occur in Gorst Creek and that the suggested action area does not support suitable habitat, the Project will have no effect on Coastal-Puget Sound bull trout.

Puget Sound steelhead trout (*Onchorhynchus mykiss*)

The Puget Sound DPS of steelhead trout, a federally threatened species, inhabits cold-water rivers and streams with deep low-velocity pools, gravel substrate free of excessive silt and connectivity between to ocean habitats for annual spawning and feeding migrations (NOAA Fisheries 2015).

Although WDFW (2015) has no record it, steelhead trout is known to at least occasionally inhabit Gorst Creek (City of Bremerton 2012).

Although there is no designated critical habitat for this DPS, the proposed critical habitat includes approximately the lowermost 1.5 miles of Gorst Creek (NOAA Fisheries 2015). Gorst Creek may

be too small for self-sustaining runs of steelhead, but it could potentially support this species irregularly as a refuge (City of Bremerton 2012).

The removal action will have no effect on Puget Sound steelhead trout for the following reasons: i) the substantial distance between the removal action and the local population of steelhead trout, ii) the irregular occurrence of steelhead trout within the stream, and iii) the above-mentioned BMPs.

Marbled Murrelet (*Brachyramphus marmoratus*)

Marbled murrelets are seabirds that nest on large branches or other suitable, large platforms in mature or old growth conifers (Hamer and Nelson 1995, Hamer 1995, WDFW 2013). During the breeding season, marbled murrelets prey on small schooling fish underwater in near-shore and protected coastal waters (WDFW 2013). During non-breeding periods, marbled murrelets are typically found in stratified, near-shore waters similar to their summer foraging areas (Nelson 1997).

The suggested action area does not support potential nesting habitat or nearshore marine waters for marbled murrelet foraging or loafing. There is no critical habitat mapped for marbled murrelet in Kitsap County. Furthermore, marbled murrelet nests have not been documented in Kitsap County (WDFW 2013).

Given that they do not occur in Kitsap County and that the suggested action area does not support suitable habitat, the Project will have no effect on the marbled murrelet.

Streaked Horned Lark (*Eremophila alpestris strigata*)

The streaked horned lark, a subspecies of the horned lark (*Eremophila alpestris*) listed as threatened under the ESA, nests on grasslands (Pearson and Altman 2005) and sparsely vegetated areas at airports, sandy islands, and coastal spits in Washington (WDFW 2013). Their winter habitats are similar to their nesting habitats (USFWS 2013). The Site does not support such conditions, no critical habitat is mapped for streaked horned lark in Kitsap County, and no streaked horned lark nesting has ever been documented in Kitsap County (WDFW 2013).

Given that they do not occur in Kitsap County and that the suggested action area does not support suitable habitat, the Project will have no effect on the streaked horned lark.

Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)

The western U.S. Distinct Population Segment of the yellow-billed cuckoo, which is federally threatened, prefers large, contiguous tracts of riparian woodlands with cottonwoods (*Populus* spp.) and willows (*Salix* spp.) (WDFW 2013).

There is no critical habitat mapped for yellow-billed cuckoo in Kitsap County or anywhere in Washington. Yellow-billed cuckoos no longer breed in Washington, and only four individuals have been recorded in western Washington since 1950 (WDFW 2013).

Given that they do not breed in Washington and that the suggested action area does not support suitable habitat, the Project will have no effect on the yellow-billed cuckoo.

E & E's determination that the removal action would have no effect on species managed under the ESA is predicated upon the lack of any ESA-managed species at the Site or in areas immediately adjacent to the Site. Furthermore, the planned BMPs will avoid and minimize any adverse effects from occurring during project implementation.

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January 7, 2016

Page 6

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